Inadequacy of equipments in Meteorological department

2521. SHRIMATI S.G. INDIRA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that the country requires at least 1,850 weather observatories if the India Meteorological Department has to accurately forecast the monsoon, whereas it has only 182 of them;

(b) whether it is also a fact that for proper monsoon forecast the country requires as many as 5,000 satellite based automatic rain gauge, 50 upper air observatories, 50 equipment for preparing a profile of the wind patterns, 20 cyclone detection radars and 35 storm detection radars and whereas it did not have even a single automatic rain gauge or wind profiler and storm detection radars have become obsolete; and

(c) if so, the steps taken by Government to acquire these much required equipments?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) Yes, Sir. For effective weather monitoring on the district scale, each district requires atleast 3 surface observatories. At present there are only 182 departmental surface observatories. These are highly inadequate to meet requirements of monitoring and forecasting of monsoon at various tune scales and spatial resolution.

(b) Yes, Sir. For improved monsoon forecast particularly lor its dry and wet spells with better spatial resolution, augmentation of IMD's observing network is felt necessary. It is planned to replace existing observing systems with latest state-of-art systems and also to create dense country wide network of satellite reporting rain gauges for real time online monitoring of monsoon activity.

(c) Action has already been intiated in this direction and a proposal has been submitted to the Government.

Centre for Marine Bio-Technology in Gujarat

2522. PROF. ALKA BALRAM KSHATRIYA:
SHRI LEKHRAJ BACHANI:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government have received a proposal from the

State Government of Gujarat to establish a Centre for Marine Biotechnology in Gujarat;

(b) if so, Government's reaction in this regard; and

(c) the plan provision for Centre for Marine Biotechnology in the Tenth Plan and their locations?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRl KAPIL SIBAL): (a) Yes, a collaborative project proposal has been received from the Central Salt & Marine Chemical Research Institute (CSMCRI), Bhavnagar and Department of Science & Technology, Government of Gujarat, Ahmedabad, in the Department of Biotechnology (DBT), Government of India.

(b) The proposal was examined by the Department and was found to have a large overlap with the programmes and activities of the CSMCRI (CSIR Institute). The institute has been asked to re-examine the proposal *vis-a-vis* the existing mandate of CSMCRI and submit a revised version for DBT's consideration.

(c) There is no specific provision for the establishment of Centre for Marine Biotechnology in the Tenth Five Year Plan. The proposals would be considered on the basis of need and merit.

Cooperation with Germany in the field of S&T

2523. PROF. ALKA BALRAM KSHATRIYA:
DR. T. SUBBARAMI REDDY:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether in order to improve cooperation in the area of Science and Technology between India and Germany, the two countries are in the process of setting up an Indo-German research training group on nano-materials;

(b) if so.whetner any concrete proposals in this regard have been received;

(c) if so.the details thereof;

(d) whether Germans are keen to have a collaboration with India particularly in the area of IT and Biotechnology; and